



### Future Telecommunications

How we get to World Class





## Enterprise Issues

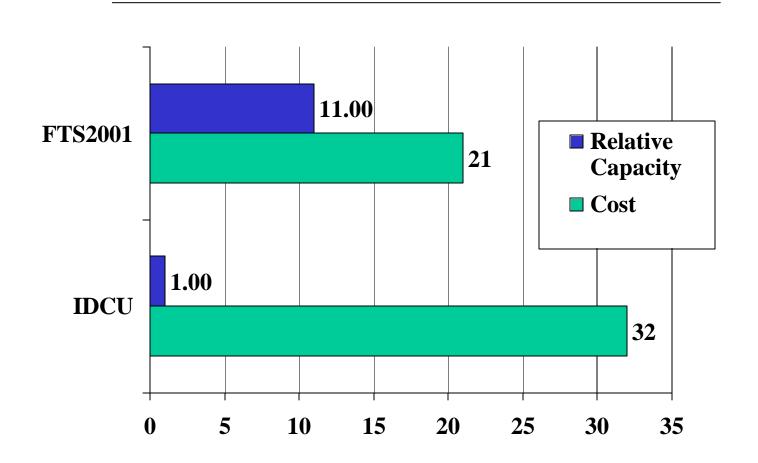
- The VA Enterprise Wide Area Network
- VA Radio Systems
  - Mission critical systems
  - Emergency systems
- Telephone systems
- Video
  - (To be addressed later)







# Cost versus Capacity







### The Missing Pieces

- Uniform network architecture
- Uniform measurement or management of the network
- Uniform network routing
- Network Security
- Other





#### To Get to World-Class

- Create an enterprise network architecture
- Develop SLA's to ensure measurable criteria for evaluating performance and satisfaction
- Integrate network monitoring and management across the enterprise
- Manage capacity and performance





### To Get to World-Class

- Develop and use VA standards for network interface (including security)
  - LANs
  - Non-VA WANs and Domains
- Consolidate network trouble reporting and tracking







#### The Final Touches

- The Enterprise Service Network
  - Trade circuits for service
    - Switched service (SVC)
    - Assured service
    - Secure
    - Bandwidth on Demand
    - IP-based input
    - End-to-end monitoring and management





#### When?

- "As built" survey due January 31, 2002
- Conversion starts March 1, 2002
- Expected finish March 31, 2003
  - Based on findings







### VA Radio Systems

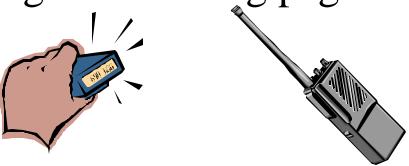
- VA's VHF and UHF radio systems support mission critical functions:
- HF radio supports SHARES (Shared Resources)





### VA Radio Systems

- VA has over 3600 frequency assignments
- 1300 Radio systems at 256 sites
  - Roughly 80% are VHF
- 62,000+ individual pieces of radio gear including pagers









#### Narrowband Transition

• In 1996, NTIA required all government UHF and VHF radio systems to migrate to narrowband use.

VHF systems must be narrowband compliant
by January 1, 2005

UHF systems have until
January 1, 2008





#### The Situation

With 680 business days remaining before the 2005 deadline, VA has replaced only 20% of its VHF and UHF radio systems







#### The Situation

 The Office of Telecommunications estimates it will cost about \$90 Million to replace the remaining equipment







#### What Can We Do?

#### Plan to replace your radio system soon



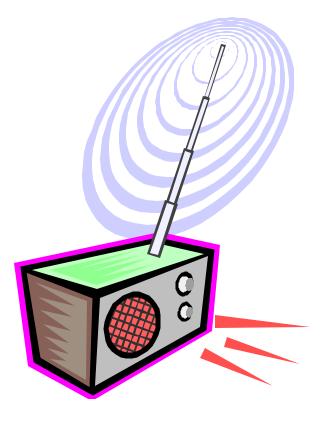




#### **SHARES**

#### National Communication System (NCS) program

- Uses HF radios for emergency communication
- VA is a sponsor of the SHARES program

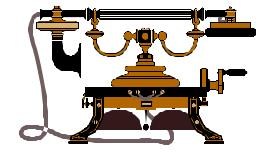






### Telephones

- Equipment
  - Telephone switches will be with us for some time
  - VA needs to revisit use of a multi-vendor contract to supply and maintain switches
- VOIP needs to be considered as an enterprise tool







## How You Can Help

• Support the effort to evaluate the network

• Consider the Service Level Agreement best suiting your facility

 Prepare to replace your current VHF and UHF radio system





### How You Can Help

- Support the effort to reinvigorate SHARES
- Support tools to speed acquisition and deployment of telecommunications hardware and services
- Evaluate your mission critical circuits and request restoration priorities